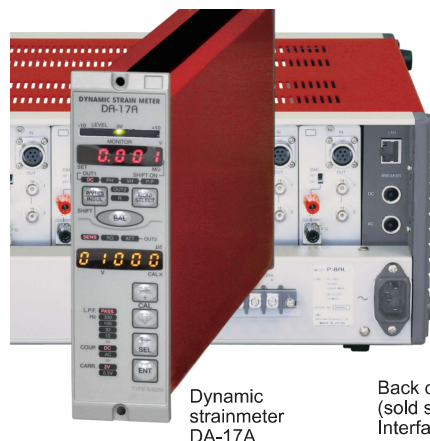


DA-17A (Carrier type)

- Digital sensitivity setting method
- Electronic automatic balancing
- Input/output isolation
- Automatic tracking type capacity balancing
- Equipped with digital monitor function
- Dual output method
- Built-in low-pass filter
- Equipped with strain bridge insulation check function
- Capable of external control of balance and calibration output
- Dual power supply method of AC and DC



Dynamic strainmeter DA-17A

Back of dedicated case (sold separately) Interface part

This is a carrier type dynamic strainmeter that can be externally controlled via a PC. A digital sensitivity setting method is adopted for sensitivity adjustment to easily perform accurate sensitivity adjustments. In addition, such functions as automatic tracking capacity balancing and digital monitoring of measurement values enable highly reliable dynamic strain measurements. Although this equipment is designed for one channel use when used alone, it can be configured for multichannel use by incorporating it into the dedicated case or rack.

Specifications

Number of measuring points	1 point
Applicable gauge resistance	60–1000 Ω
Gauge factor	2.00
Bridge excitation	2 or 0.5 Vrms (5 kHz)
Balancing method	
Resistance	Electronic automatic (remote control possible) Adjustment time: About 2 seconds Using nonvolatile memory
Capacity	Electronic automatic tracking
Balancing range	
Resistance	$\pm 10000 \times 10^{-6}$ strain
Capacity	5000 pF
Balancing accuracy	$\pm 1 \times 10^{-6}$ strain or less (Bridge excitation 2 Vrms, SENS of 200×10^{-6} strain or less)
Rated output (RO)	1 to 10 V can be set in 1 V steps
Sensitivity adjustment (SENS)	For rated output of 1 V, 50 to 5000×10^{-6} strain For rated output of 10 V, 500 to 10000×10^{-6} strain Both can be set in 1×10^{-6} strain steps (Bridge excitation 2 Vrms)
Fine adjustment (ATT)	0 to 1 times (OUT 2 only)
Sensitivity	50×10^{-6} strain, at bridge excitation of 2 Vrms
OUT V	1 V (5 k Ω load)
OUT I	12 mA or more (30 Ω load)
Measurement range	$\pm 50000 \times 10^{-6}$ strain (bridge excitation 2 Vrms)
Nonlinearity	$\pm 0.1\%$ FS
Maximum output	
OUT V	± 10 V (5 k Ω load)
OUT I	± 20 mA (30 Ω load) or ± 10 V (100 k Ω load)
Output shift	-10 to +10 V or OFF (can be set in 1 mV steps)
Calibration output	
Voltage	$\pm$ (RO, RO/2)
Accuracy	$\pm 0.5\%$ RO
Response frequency range	DC to 2.5 kHz (-3 dB ± 1 dB) (Low pass filter: PASS, with coupling DC)
Low-pass filter	
Cutoff frequency	10, 30, 100, 300 Hz (-3 dB ± 1 dB) and PASS
Cutoff property	Butterworth property -12 dB ± 1 dB/oct (10 Hz to 300 Hz)

High-pass filter	Coupling AC mode
Cutoff frequency	About 0.3 Hz
S/N ratio	For bridge excitation 2 Vrms, maximum output 10 V 60 dBp-p or more (SENS = 100×10^{-6} strain or more, RO = 1 V, LPF = PASS) 64 dBp-p or more (SENS = 200×10^{-6} strain or more, RO = 1 V, LPF = PASS)
Stability	
Zero point	0.1×10^{-6} strain/ $^{\circ}$ C (at max. sensitivity) $\pm 0.5 \times 10^{-6}$ strain/24 h (at max. sensitivity) (Bridge excitation 2 Vrms)
Sensitivity	$\pm 0.05\%$ FS/ $^{\circ}$ C $\pm 0.2\%$ FS/24h
Output monitor	Four-digit 1/2 digital display (Maximum/minimum values and over display function available) 21-point LED level meter
Vibration tolerance	29.4 m/s ² (50 Hz, 0.6 mmp-p) three directions
Operating temperature / humidity range	-10 to +50C ^o 85% RH or less (No condensation)
Power supply	
AC power supply	(1) Rated voltage: AC 100 V, 50/60 Hz Allowable voltage: AC 90 to 132 V, 50/60 Hz (2) Rated voltage: AC 200 V to 240 V, 50/60 Hz Allowable voltage: AC 180 to 250 V, 50/60 Hz (Either (1) or (2) as specified by the customer) Maximum power consumption: 7.5 VA max. (AC 100 V)
DC power supply	Rated voltage: DC 12 to 24 V Allowable voltage: DC 10 to 30 V Maximum power consumption: 0.25 A max. (DC 12 V)
Outside dimension	40 (W) $\times$ 140 (H) $\times$ 266 (D) mm (Excluding protrusions)
Mass	Approx. 870 g

Standard accessories

Instruction Manual	1
AC power cable (CR-04)*	1
Output cable (CR-31).....	2
Accessory box	1
Dedicated mounting screw (M3 bind screw).....	2
Vinyl washer	2
Warranty certificate	1

* CR-061 included with DC power supply specification